REMARKS

Amended Claims

Claims 1, 6-7, 11, 14, 16, 20, 25-26, 29-31, 33, 38, 40, and 42-44 are amended herein.

Claim Rejections Under 35 U.S.C. § 102

Claims 1-35 and 37-44 were rejected under 35 U.S.C. § 102(b) as being anticipated by Sekine (U.S. Patent No. 5,896,398). Applicant respectfully traverses this rejection and submits that claims 1-35 and 37-44 are allowable for at least the following reasons.

The Examiner specifically stated that Sekine disclosed "'[a] *method of operating a non-volatile memory* [Sekine discloses in column 1, line 13, 'A flash memory is a non-volatile IC memory ...'] *device driver* [The examiner interprets device driver as 'data processing programs' disclosed by Sekine in column 8, line 38.] *comprising: counting a number of access cycles to a non-volatile memory;* [disclosed e.g. in column 4, lines 42-45] *and halting execution at a selected count.'* [column 7, lines 19-21, '...when the writing test is repeated until the predetermined maximum number of times, the process terminates and proceeds to the next test.']"

Applicant respectfully disagrees and maintains that Sekine teaches a Flash memory test system that tests Flash memory devices after they have been manufactured by writing data to the Flash memory device(s) being tested and reading it back to find defective memory elements in the arrays and not a method of operating a non-volatile memory device driver comprising counting a number of access cycles to a non-volatile memory and halting execution at a selected count. Specifically, Applicant respectfully maintains that Sekine, Column 4, Lines 42-45 and Column 7, Lines 19-21 does not teach or disclose counting a number of access cycles to a non-volatile memory and halting access to the non-volatile memory at a selected count, but counting the number of write operations required for a successful data write or data write failure (when a maximum number of repetitions is reached) at a specified address of the flash memory. After which the flash memory test system does not halt, but moves on to the next test pattern or address. As such, Applicant respectfully maintains that Sekine does not teach or disclose counting to a selected count value, but counting the number of accesses that occur until a successful write or write failure. Applicant also maintains that Sekine does not teach or disclose halting access to the non-volatile memory at a selected count value, but moving to next test, test pattern or memory address upon the occurrence of a successful write or the occurrence of a write

failure. (*See*, Sekine, Figure 3; Column 7, Lines 15-39; Column 7, Line 58 to Column 8, Line 29; and Column 4, Lines 41-45.)

In addition, Applicant respectfully maintains that the cited "data processing programs" of Sekine at Column 8, Line 38 do not teach a device driver, as claimed by the Examiner, but discloses analysis programs running on the "EWS" Workstation 20 to analyze data from the flash memory devices under test stored on the disk 21 of the Flash memory test system. As such, since these programs run only on the workstation 20 to process the resulting test data on the disk 21 and do not interact with the Flash memory device, Applicant respectfully maintains they do not teach or disclose Flash memory device driver programs. (*See*, Sekine, Figures 1 and 2; Column 8, Lines 30-61.)

Applicant respectfully submits that if the Examiner maintains that a flash memory device driver is an inherent feature of Sekine, or is so well known in the art to so as allow Official Notice of the feature, Applicant herein traverses any such assertion and requests a reasoned argument or secondary reference to support any such position by the Examiner. Applicant respectfully notes that the Examiner has the burden of proving that the inherent element must of necessity only work in the manner of the Applicant's claimed invention. If any other interpretation is possible for the inherent element relied upon for the rejection, the rejection cannot be maintained. Applicant respectfully maintains that adequate information and argument has been given to create on its face a reasonable doubt regarding the circumstances justifying the inherency and/or judicial notice. *See*, MPEP §2112 and §2144.03.

Further, Applicant has carefully reviewed the reference Sekine and has found no mention of the Flash memory test system removing power from the Flash memory under test or executing a power loss recovery operation on the Flash memory device under test contrary to the Examiner's assertions. As such the Applicant respectfully maintains that Sekine does not disclose or teach removing power from the Flash memory under test or executing a power loss recovery operation on the Flash memory device under test and/or requests a reasoned statement clarifying the Examiner's position in regards to this assertion.

Applicant therefore respectfully submits that Sekine fails to teach or disclose a method of counting the number of accesses to a Flash memory device and halting when a selected number of accesses is reached. As such, Sekine fails to teach or disclose all elements of Applicant's claims.

Applicant's claim 1, as pending, recites "[a] method of operating a non-volatile memory device driver comprising counting a number of access cycles to a non-volatile memory; and

halting access to the non-volatile memory at a selected count." As detailed above, Applicant submits that Sekine fails to teach or disclose such a method of operating a non-volatile memory device driver that counts the number of access cycles to a non-volatile memory and halts access to the non-volatile memory at a selected count. As such, Sekine fails to teach or disclose all elements of independent claim 1.

Applicant's claim 11, as pending, recites "[a] method of operating a system comprising counting a number of access operations to a Flash memory device coupled to a host; and stopping access execution to the Flash memory at a selected number of access operations." As detailed above, Applicant submits that Sekine fails to teach or disclose such a method of operating a system to count the number of access cycles to a Flash memory device coupled to a host and stop access execution to the Flash memory at a selected number of access operations. As such, Sekine fails to teach or disclose all elements of independent claim 11.

Applicant's claim 20, as pending, recites "[a] method of testing a Flash memory comprising counting a number of access operations to a Flash memory for a Flash command; interrupting execution of the Flash command at a selected halt count of access operations, halting access to the Flash memory; and executing a power loss recovery cycle to test power loss recovery at the selected halt count." As detailed above, Applicant submits that Sekine fails to teach or disclose such a method of testing a Flash memory. As such, Sekine fails to teach or disclose all elements of independent claim 20.

Applicant's claim 31, as pending, recites "[a] method of profiling a Flash command comprising counting a number of access operations to a Flash memory during execution of a Flash command to create an access operation profile for the Flash command; and comparing the access operation profile of two or more Flash commands." As detailed above, Applicant submits that Sekine fails to teach or disclose such a method of profiling a Flash command. As such, Sekine fails to teach or disclose all elements of independent claim 31.

Applicant's claim 33, as pending, recites "[a] system comprising at least one Flash memory device; and a host coupled to the at least one Flash memory device, wherein the host is adapted to count a number of access operations to the at least one Flash memory device during a Flash command and halt execution of the Flash command, stopping access to the Flash memory device at a selected count of access operations." As detailed above, Applicant submits that Sekine fails to teach or disclose such a system wherein the host is adapted to count a number of access operations to the at least one Flash memory device during a Flash command and halt execution of the Flash command, stopping access to the Flash memory device at a selected count

of access operations. As such, Sekine fails to teach or disclose all elements of independent claim 33.

Applicant's claim 40, as pending, recites "[a] machine-usable medium, the machine-usable medium containing a software routine for causing a processor to execute a method, wherein the method comprises counting a number of access cycles to a Flash memory; and halting execution at a selected count, halting access to the Flash memory." As detailed above, Applicant submits that Sekine fails to teach or disclose such a machine-usable medium having a method that counts a number of access cycles to a Flash memory and halts access to the Flash memory at a selected count. As such, Sekine fails to teach or disclose all elements of independent claim 40.

Applicant's claim 43, as pending, recites "[a] system comprising at least one Flash memory device; and a host coupled to the at least one Flash memory device, wherein the host comprises a means for counting the number of access cycles to the at least one Flash memory device during execution of a Flash command and comprises a means for halting execution of the Flash command on the at least one Flash memory device in response to the count of the access cycle counting means, stopping access to the Flash memory device." As detailed above, Applicant submits that Sekine fails to teach or disclose such a system wherein the host comprises a means for counting the number of access cycles to the at least one Flash memory device during execution of a Flash command and comprises a means for halting execution of the Flash command on the at least one Flash memory device in response to the count of the access cycle counting means. As such, Sekine fails to teach or disclose all elements of independent claim 43.

Applicant respectfully contends that claims 1, 11, 20, 31, 33, 40 and 43 as pending has been shown to be patentably distinct from the cited reference. As claims 2-10, 12-19, 21-30, 32, 34-35, 37-39, 41-42, and 44 depend from and further define claims 1, 11, 20, 31, 33, 40 and 43, respectively, they are also considered to be in condition for allowance. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(b) and allowance of claims 1-35 and 37-44.

Claim Rejections Under 35 U.S.C. § 103

Claims 35 and 36 were rejected under 35 U.S.C. § 103(a) as being obvious over Sekine (U.S. Patent No. 5,896,398) in view of Kim (U.S. Patent Publication No. 2003/0075609 A1). Applicant respectfully traverses this rejection and submits that claims 35 and 36 are allowable for the following reasons.

Applicant respectfully maintains, as stated above, that Sekine fails to teach or suggest all elements of claim 33, from which claims 35 and 36 depend from. As such, Applicant respectfully maintains that Sekine also fails to teach or suggest all elements of claim 33. In addition, Applicant respectfully maintains that Kim discloses a memory card having an improved transmission speed and that memory cards include SMC, MMC and Memory Stick interface designs and can include NAND and NOR flash memory, but does not teach or disclose a method of counting the number of accesses to a Flash memory device and halting when a selected number of accesses is reached. Applicant further respectfully maintains that Kim fails to teach or disclose a Flash memory device having one of a PCMCIA-ATA, a Compact Flash (CF), a USB Flash, and a Secure Digital Memory Card compatible interface. *See*, Kim, Abstract and Paragraphs [0005], [0019], and [0023]. Applicant therefore respectfully submits that combining the elements of Sekine with Kim fails to teach or suggest all elements of independent claim 33, and thus also fails to teach or suggest all elements of dependent claims 35 and 36, either alone or in combination.

Applicant respectfully contends that claim 33 as pending has been shown to be patentably distinct from the cited references, either alone or in combination. As claims 35 and 36 depend from and further defines claim 33 they are also considered to be in condition for allowance. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) and allowance of claims 35 and 36.

CONCLUSION

In view of the above remarks, Applicant believes that all pending claims are in condition for allowance and respectfully requests a Notice of Allowance be issued in this case. Please charge any further fees deemed necessary or credit any overpayment to Deposit Account No. 501373.

If the Examiner has any questions or concerns regarding this application, please contact the undersigned at (612) 312-2207.

Respectfully submitted,

Date: 5/1/06

Andrew C. Walseth
Reg. No. 43,234

Attorneys for Applicant
Leffert Jay & Polglaze
P.O. Box 581009
Minneapolis, MN 55458-1009
T (612) 312-2200
F (612) 312-2250